



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,973	05/26/2000	Paul Tat-Keung Ng	OMC1159.009	1021

27062 7590 05/31/2002

COOK & FRANKE S.C. (OMC)
660 EAST MASON STREET
MILWAUKEE, WI 53202

EXAMINER

DOLINAR, ANDREW M

ART UNIT

PAPER NUMBER

3747

DATE MAILED: 05/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/579,973

Applicant(s)

NG, PAUL TAT-KEUNG

Examiner

Andrew M. Dolinar

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 and 42-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-20, 40 and 42-53 is/are allowed.
- 6) ☒ Claim(s) 1, 7-14, 21-24 and 26-36 is/are rejected.
- 7) ☒ Claim(s) 2-6, 25 and 37-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

Art Unit: 3747

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7-14, 21-24 and 26-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Tobinaga et al. Krueger discloses an electronic engine control system for ignition and fuel injection in a rope-start engine without a battery which may be used in a snowmobile but does not determine reverse running and disable the firing sequence in a two stroke engine. Tobinaga et al teaches that it is known to determine reverse running and disable the firing sequence in a two stroke engine. Rotational position is determined as set forth at column 5, lines 56-61. Reverse running determination and disabling of the firing sequence is described at column 16, lines 23-43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electronic engine control system of Krueger for use in a two stroke engine and to include a reverse running disabling feature, as taught by Tobinaga et al, in order to provide an operative engine and to prevent damage to the engine. The resulting control system would inherently perform the method of claims 1 and 7-14 and would inherently function as specified by claims 21-24 and 26-35. It would have been an obvious matter of design choice to include a computer in the electronic control unit per claim 36.

Art Unit: 3747

Allowable Subject Matter

Claims 15-20, 40 and 42-53 are allowed.

Claims 2-6, 25 and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive insofar as they apply to the above grounds of rejection. Regarding Tobinaga et al, a position signal corresponding to each cylinder is generated by the pulser coils (column 6, lines 37-56). Each pulser coil identifies two cylinders depending on whether the north pole or the south pole of the rotating magnet generates the pulse. A pulse is detected within 60° of rotation (column 7, lines 35-39). Therefore, contrary to applicant's assertion, rotational position is determined in less than a single revolution. Claims 1, 7-14, 21-24 and 26-35 therefore do not distinguish patentably over Krueger in view of Tobinaga et al.

Under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. See MPEP § 2112.02. The express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. "The inherent teaching of a prior art reference, a question of fact, arises both in the context of anticipation and obviousness." *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995).

Art Unit: 3747

The rejection of claims 1, 2, 6-14, 21, 22, 26-37, 48 and 49 under 35 U.S.C. 103(a) as being unpatentable over Koerner et al in view of Krueger is withdrawn since applicant has established common ownership of the patent to Koerner et al and the present application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Dolinar whose telephone number is (703) 308-1948. The examiner can normally be reached on Mon. - Thu. (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (703) 308-2696. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



Andrew M. Dolinar
Primary Examiner
Art Unit 3747

AMD
May 29, 2002